

SH

=> asymmetric and (broadcast or satellite or catv or radio)

30489 ASYMMETRIC
21885 BROADCAST
18240 SATELLITE
2446 CATV
88693 RADIO

L1 1886 ASYMMETRIC AND (BROADCAST OR SATELLITE OR CATV OR RADIO)

=> l1 and upstream and downstream

124260 UPSTREAM
157386 DOWNSTREAM

L2 154 L1 AND UPSTREAM AND DOWNSTREAM

=> l2 and ((control(p)amount) or credit)

1119709 CONTROL
1124202 AMOUNT
208411 CONTROL(P)AMOUNT
11486 CREDIT

L3 81 L2 AND ((CONTROL(P)AMOUNT) OR CREDIT)

=> d l3 1-81

1. 5,892,924, Apr. 6, 1999, Method and apparatus for dynamically shifting between routing and switching packets in a transmission network; Thomas Lyon, et al., 709/245; 370/405 [IMAGE AVAILABLE]

2. 5,892,900, Apr. 6, 1999, Systems and methods for secure transaction management and electronic rights protection; Karl L. Ginter, et al., 713/200, 201 [IMAGE AVAILABLE]

3. 5,888,763, Mar. 30, 1999, Peptides specific for the first Crk-SH3 domain; Hidesaburo Hanafusa, et al., 435/69.1, 252.3; 536/23.1 [IMAGE AVAILABLE]

4. 5,887,089, Mar. 23, 1999, Low insertion loss optical switches in display architecture; David A. G. Deacon, et al., 385/22, 2, 4, 8, 10, 14, 17, 37 [IMAGE AVAILABLE]

5. 5,881,131, Mar. 9, 1999, Analysis and validation system for provisioning network related facilities; Robert D. Farris, et al., 379/27; 370/259; 379/201, 207, 265 [IMAGE AVAILABLE]

6. 5,874,555, Feb. 23, 1999, Triple helices and processes for making same; Peter B. Dervan, et al., 536/23.1; 435/6; 436/501; 536/24.1, 24.3, 24.31, 24.32, 24.33, 25.3 [IMAGE AVAILABLE]

7. 5,867,501, Feb. 2, 1999, Encoding for communicating data and commands; Robert W. Horst, et al., 370/474 [IMAGE AVAILABLE]

8. 5,859,852, Jan. 12, 1999, Hybrid access system with automated client-side configuration; Eduardo J. Moura, et al., 370/449; 340/825.08; 370/346, 402 [IMAGE AVAILABLE]

9. 5,852,688, Dec. 22, 1998, Method for manipulating optical energy using poled structure; Michael J. Brinkman, et al., 385/10; 359/251, 283; 372/6, 102; 385/10, 37 [IMAGE AVAILABLE]
10. 5,838,894, Nov. 17, 1998, Logical, fail-functional, dual central processor units formed from three processor units; Robert W. Horst, 714/11; 709/239; 714/12 [IMAGE AVAILABLE]
11. 5,837,816, Nov. 17, 1998, Interleukin-2 receptor subunit ectodomain fusion protein comprising a leucine zipper domain; Thomas L. Ciardelli, et al., 530/350; 435/69.1, 320.1; 536/23.4, 24.1 [IMAGE AVAILABLE]
12. 5,835,458, Nov. 10, 1998, Solid state optical data reader using an electric field for routing control; William K. Bischel, et al., 369/44.12, 44.23, 44.28, 44.29, 112 [IMAGE AVAILABLE]
13. 5,828,655, Oct. 27, 1998, Hybrid access system with quality-based channel switching; Eduardo J. Moura, et al., 370/236, 237, 252, 486; 455/67.1 [IMAGE AVAILABLE]
14. 5,818,845, Oct. 6, 1998, Hybrid access system having channel allocation and prioritized polling schemes; Eduardo J. Moura, et al., 370/449, 285, 404, 911 [IMAGE AVAILABLE]
15. 5,812,786, Sep. 22, 1998, Variable rate and variable mode transmission system; John W. Seazholtz, et al., 709/233, 251 [IMAGE AVAILABLE]
16. 5,805,804, Sep. 8, 1998, Method and apparatus for scalable, high bandwidth storage retrieval and transportation of multimedia data on a network; Andrew Laursen, et al., 348/7; 370/397 [IMAGE AVAILABLE]
17. 5,790,776, Aug. 4, 1998, Apparatus for detecting divergence between a pair of duplexed, synchronized processor elements; David Paul Sonnier, et al., 714/10; 710/18, 32, 61; 714/12 [IMAGE AVAILABLE]
18. 5,790,548, Aug. 4, 1998, Universal access multimedia data network; Kamran Sistanizadeh, et al., 370/401 [IMAGE AVAILABLE]
19. 5,785,741, Jul. 28, 1998, Process and system for separation and recovery of perfluorocompound gases; Yao-En Li, et al., 96/4, 14, 134, 361 [IMAGE AVAILABLE]
20. 5,781,670, Jul. 14, 1998, Optical frequency channel selection filter with electronically-controlled grating structures; David A. G. Deacon, et al., 385/10; 359/326, 573; 385/15, 37, 40 [IMAGE AVAILABLE]
21. 5,762,878, Jun. 9, 1998, Sample container segment assembly; Frederick L. Clark, et al., 422/102; 206/459.5, 569; 215/395, DIG.3 [IMAGE AVAILABLE]
22. 5,751,955, May 12, 1998, Method of synchronizing a pair of central processor units for duplex, lock-step operation by copying data into a corresponding locations of another memory; David Paul Sonnier, et al., 714/12; 709/400; 712/43; 714/11 [IMAGE AVAILABLE]
23. 5,751,932, May 12, 1998, Fail-fast, fail-functional, fault-tolerant multiprocessor system; Robert W. Horst, et al., 714/12 [IMAGE AVAILABLE]
24. 5,732,177, Mar. 24, 1998, Controllable beam director using poled structure; David A. G. Deacon, et al., 385/122, 8, 37, 129 [IMAGE AVAILABLE]
25. 5,724,463, Mar. 3, 1998, Projection display with electrically

- controlled waveguide-routing; David A. G. Deacon, et al., 385/27, 9, 10, 18, 47, 901 [IMAGE AVAILABLE]
26. 5,717,862, Feb. 10, 1998, Method and system for message status reporting in a multi-node network; Narasimhareddy L. Annapareddy, et al., 709/237, 207 [IMAGE AVAILABLE]
27. 5,717,058, Feb. 10, 1998, Peptide inhibitors of tax-dependent transcription; Maura-Ann H. Matthews, et al., 530/328, 324, 325, 326, 327, 330 [IMAGE AVAILABLE]
28. 5,703,710, Dec. 30, 1997, Method for manipulating optical energy using poled structure; Michael J. Brinkman, et al., 359/283, 251, 252 [IMAGE AVAILABLE]
29. 5,689,689, Nov. 18, 1997, Clock circuits for synchronized processor systems having clock generator circuit with a voltage control oscillator producing a clock signal synchronous with a master clock signal; Steven C. Meyers, et al., 709/400; 713/400, 500 [IMAGE AVAILABLE]
30. 5,675,807, Oct. 7, 1997, Interrupt message delivery identified by storage location of received interrupt data; Geoffrey I. Iswandhi, et al., 710/260, 4, 263, 268, 269; 714/48 [IMAGE AVAILABLE]
31. 5,675,579, Oct. 7, 1997, Method for verifying responses to messages using a barrier message; William Joel Watson, et al., 370/248, 241; 709/237; 714/43 [IMAGE AVAILABLE]
32. 5,664,032, Sep. 2, 1997, Display panel with electrically-controlled waveguide-routing; William K. Bischel, et al., 385/4, 2, 8, 10, 14, 15, 16, 17, 37, 40, 130, 131, 901 [IMAGE AVAILABLE]
33. 5,652,817, Jul. 29, 1997, Optical power splitter with electrically-controlled switching structures; Michael J. Brinkman, et al., 385/37, 16 [IMAGE AVAILABLE]
34. 5,647,036, Jul. 8, 1997, Projection display with electrically-controlled waveguide routing; David A. G. Deacon, et al., 385/27, 9 [IMAGE AVAILABLE]
35. 5,646,049, Jul. 8, 1997, Scheduling operation of an automated analytical system; Apparao Tayi, 436/518; 422/63, 64, 65, 67; 435/7.9, 7.92, 7.93, 7.94, 287.1, 287.2, 287.3; 436/43, 47, 48, 50, 538, 541, 805, 807, 808, 809 [IMAGE AVAILABLE]
36. 5,644,573, Jul. 1, 1997, Methods for coordinating **upstream** discrete multi-tone data transmissions; John A.C. Bingham, et al., 370/503, 528 [IMAGE AVAILABLE]
37. 5,635,364, Jun. 3, 1997, Assay verification control for an automated analytical system; Frederick L. Clark, et al., 435/7.92; 422/63, 64; 435/7.93, 7.94, 962, 967; 436/43, 172, 518, 526, 533, 534, 536, 538, 539, 541, 805 [IMAGE AVAILABLE]
38. 5,630,004, May 13, 1997, Controllable beam director using poled structure; David A. G. Deacon, et al., 385/129, 9, 10, 37, 40 [IMAGE AVAILABLE]
39. 5,627,522, May 6, 1997, Automated liquid level sensing system; Donny R. Walker, et al., 340/618; 73/864.22, 864.24, 864.33; 340/620 [IMAGE AVAILABLE]
40. 5,610,069, Mar. 11, 1997, Apparatus and method for washing clinical apparatus; Frederick L. Clark, et al., 436/49; 422/67, 100; 436/50, 55 [IMAGE AVAILABLE]

41. 5,605,665, Feb. 2, 1997, Reaction vessel; Frederick L. Clark, et al., 422/102; 220/505; 422/63, 64; 436/43, 47, 48 [IMAGE AVAILABLE]
42. 5,592,540, Jan. 7, 1997, Method and apparatus for selectively delivering telephony signals on a hybrid coaxial cable network; Gregory J. Beveridge, 379/184; 348/6, 7, 8, 12, 13, 16, 17; 379/177, 183; 455/4.2, 5.1, 26.1 [IMAGE AVAILABLE]
43. 5,586,206, Dec. 17, 1996, Optical power splitter with electrically-controlled switching structures; Michael J. Brinkman, et al., 385/37, 8, 16 [IMAGE AVAILABLE]
44. 5,586,121, Dec. 17, 1996, **Asymmetric** hybrid access system and method; Eduardo J. Moura, et al., 370/404; 348/12; 370/276, 312, 412, 463, 468, 486; 379/202; 455/5.1 [IMAGE AVAILABLE]
45. 5,581,642, Dec. 3, 1996, Optical frequency channel selection filter with electronically-controlled grating structures; David A. G. Deacon, et al., 385/15; 359/573; 385/10, 37, 40 [IMAGE AVAILABLE]
46. 5,578,494, Nov. 26, 1996, Cap actuator for opening and closing a container; Frederic L. Clark, et al., 436/54; 215/235, 239, 240; 220/262, 283; 222/556, 562; 422/63, 64, 102, 104; 436/43, 47 [IMAGE AVAILABLE]
47. 5,575,978, Nov. 19, 1996, Sample container segment assembly; Frederick L. Clark, et al., 422/104; 206/563; 422/63, 64, 102; 436/43, 47 [IMAGE AVAILABLE]
48. 5,574,849, Nov. 12, 1996, Synchronized data transmission between elements of a processing system; David P. Sonnier, et al., 714/12 [IMAGE AVAILABLE]
49. 5,570,126, Oct. 29, 1996, System for composing multimedia signals for interactive television services; Donald E. Blahut, et al., 348/7, 13; 455/4.2 [IMAGE AVAILABLE]
50. 5,559,858, Sep. 24, 1996, Method and apparatus for delivering secured telephony service in a hybrid coaxial cable network; Gregory J. Beveridge, 379/56.2, 157 [IMAGE AVAILABLE]
51. 5,544,268, Aug. 6, 1996, Display panel with electrically-controlled waveguide-routing; William K. Bischel, et al., 385/4, 16 [IMAGE AVAILABLE]
52. 5,540,890, Jul. 30, 1996, Capped-closure for a container; Frederick L. Clark, et al., 422/102; 215/235; 220/212.5, 263; 422/63, 64, 100; 436/43, 180 [IMAGE AVAILABLE]
53. 5,536,471, Jul. 16, 1996, Syringe with bubble flushing; Frederic L. Clark, et al., 422/63; 73/864.12; 422/81, 100; 436/54, 180 [IMAGE AVAILABLE]
54. 5,514,278, May 7, 1996, Counterflow microbiological processes; Boris M. Khudenko, 210/605, 625, 631 [IMAGE AVAILABLE]
55. 5,507,410, Apr. 16, 1996, Meia cartridge feeder; Frederick L. Clark, et al., 221/171; 414/754 [IMAGE AVAILABLE]
56. 5,504,772, Apr. 2, 1996, Laser with electrically-controlled grating reflector; David A. G. Deacon, et al., 372/102 [IMAGE AVAILABLE]
57. 5,491,762, Feb. 13, 1996, ATM switch with electrically-controlled waveguide-routing; David A. G. Deacon, et al., 385/16, 37 [IMAGE AVAILABLE]

58. 5,488,681, Jan. 30, 1996, Method for controllable optical power splitting; David A. G. Bacon, et al., 385/37 [IMAGE AVAILABLE]
59. 5,469,495, Nov. 21, 1995, Method and apparatus for delivering secured telephone service in hybrid coaxial cable network; Gregory J. Beveridge, 379/56.2; 348/14; 370/490; 455/1 [IMAGE AVAILABLE]
60. 5,440,335, Aug. 8, 1995, Method and apparatus for delivering passband and telephony signals in a coaxial cable network; Gregory J. Beveridge, 348/13, 6, 12; 455/6.3 [IMAGE AVAILABLE]
61. 5,417,214, May 23, 1995, Quantitative blood flow measurement using steady-state transport-induced adiabatic fast passage; David A. Roberts, et al., 600/413; 324/306; 600/419 [IMAGE AVAILABLE]
62. 5,416,616, May 16, 1995, Incoherent/coherent readout of double angularly multiplexed volume holographic optical elements; B. Keith Jenkins, et al., 359/11, 10, 27, 28; 369/103 [IMAGE AVAILABLE]
63. 5,320,099, Jun. 14, 1994, MR angiography using steady-state transport-induced adiabatic fast passage; David A. Roberts, et al., 600/413; 324/306, 309; 600/419, 500 [IMAGE AVAILABLE]
64. 5,013,338, May 7, 1991, Plasma-assisted polymerization of monomers onto polymers and gas separation membranes produced thereby; Madhu Anand, et al., 96/4; 95/54; 96/13; 427/488 [IMAGE AVAILABLE]
65. 5,008,825, Apr. 16, 1991, Apparatus and methods for automatically maintaining aircraft track angle; Arun A. Nadkarni, et al., 701/4; 244/178, 181 [IMAGE AVAILABLE]
66. 4,977,582, Dec. 11, 1990, Synchronization of non-continuous digital bit streams; Robert K. Nichols, et al., 375/371; 370/517 [IMAGE AVAILABLE]
67. 4,958,341, Sep. 18, 1990, Integrated packetized voice and data switching system; Jayant G. Hemmady, et al., 370/352, 380, 427 [IMAGE AVAILABLE]
68. 4,942,574, Jul. 17, 1990, Concurrent resource request resolution mechanism; Bruce R. Zelle, 370/400; 340/825.5 [IMAGE AVAILABLE]
69. 4,922,486, May 1, 1990, User to network interface protocol for packet communications networks; William P. Lidinsky, et al., 370/427; 340/825.34 [IMAGE AVAILABLE]
70. 4,899,333, Feb. 6, 1990, Architecture of the control of a high performance packet switching distribution network; Gary A. Roediger, 370/427 [IMAGE AVAILABLE]
71. 4,897,874, Jan. 30, 1990, Metropolitan area network arrangement for serving virtual data networks; William P. Lidinsky, et al., 380/3; 340/825.31, 825.34; 370/422, 427; 380/25 [IMAGE AVAILABLE]
72. 4,896,319, Jan. 23, 1990, Identification and authentication of end user systems for packet communications network services; William P. Lidinsky, et al., 370/427; 340/825.34 [IMAGE AVAILABLE]
73. 4,894,824, Jan. 16, 1990, Control network for a rapid connection circuit switch; Jayant G. Hemmady, et al., 370/380 [IMAGE AVAILABLE]
74. 4,893,302, Jan. 9, 1990, Arrangement for switching concentrated telecommunications packet traffic; Jayant G. Hemmady, et al., 370/427 [IMAGE AVAILABLE]

75. 4,875,206, Oct. 17, 1989, High bandwidth interleaved buffer memory and control; Robert K. Nichols, et al., 370/427; 340/825.3; 370/460, 907 [IMAGE AVAILABLE]

76. 4,872,160, Oct. 3, 1989, Integrated packetized voice and data switching system; Jayant G. Hemmady, et al., 370/353, 427 [IMAGE AVAILABLE]

77. 4,872,159, Oct. 3, 1989, Packet network architecture for providing rapid response time; Jayant G. Hemmady, et al., 370/352, 380 [IMAGE AVAILABLE]

78. 4,872,158, Oct. 3, 1989, Distributed control rapid connection circuit switch; Gaylord W. Richards, 370/380 [IMAGE AVAILABLE]

79. 4,872,157, Oct. 3, 1989, Architecture and organization of a high performance metropolitan area telecommunications packet network; Jayant G. Hemmady, et al., 370/400, 425 [IMAGE AVAILABLE]

80. 4,742,576, May 3, 1988, Optical communication system employing coherent detection and method; Donald H. McMahon, 359/126, 168, 182, 183, 184, 190, 191 [IMAGE AVAILABLE]

81. 4,643,268, Feb. 17, 1987, Air lifted and propelled vehicle; Thomas E. Jones, et al., 180/116; 104/23.2; 114/67A; 180/125; 244/12.1, 23R; 414/676 [IMAGE AVAILABLE]

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